

SGC24012\_IP007704\_GF\_22FDX

## HIGH RESOLUTION 12-BIT JTM / ADC

### Features

- High resolution temperature and voltage measurement
- $\Delta V_{be}$  temperature measurement
- High noise immunity ( $\Delta\Sigma$  ADC)
- 0.20°C resolution

### General Description

SGC24012\_IP007704\_GF\_22FDX is an accurate high-resolution ADC for temperature or voltage monitoring. Due to its high accuracy, it has a wide range of applications from predictive protection systems to temperature compensation of crystal oscillators. Making use of a 12-bit advanced fully differential  $\Delta\Sigma$  ADC, the SGC24012\_IP007704\_GF\_22FDX offers excellent repeatability and high PSRR. Specified from  $T_j = -40^\circ\text{C}$  to  $+125^\circ\text{C}$ , it is designed to achieve 2% overall temperature accuracy.

### Applications

- General purpose ADC
- In chip temperature monitoring
- Crystal oscillator temperature curve compensation

### Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
$V_{AVDD}$	Analog Voltage	1.60	-	1.98	V
$V_{DVDD}$	Digital Voltage	0.70	-	0.90	V
$F_{CLK}$	Clock Range	0.50	1.00	1.50	MHz